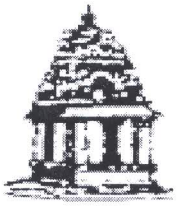

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

DIVISION: BYATARAYANAPURA

SUB DIVISION: KODIGEHALLI

Name of Work: *Modified Estimate for Improvements to Roads at Deo Residency and Legacy area of Jakkur Plantation in Ward No 07, Byatarayanapura..*

Job Code: 007-18-000036

Estimated Cost: Rs. 49,50,000.00
Modified Amount: Rs. 49,45,514.00

BRUHAT BANGALORE MAHANAGARA PALIKE

Project: Modified Estimate for Improvements to Roads at Deo Residency and Legacy area of Jakkur Plantation in Ward No 07, Byatarayanapura.

							Construction Cost:		4945514.00
Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.133, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	Desilt	Cum							
	Road1(from NH4)		2	125.00	0.50	0.50	62.50		
	Road2		2	170.00	0.50	0.50	85.00		
	Road3		2	150.00	0.50	0.50	75.00		
	Road4		2	45.00	0.50	0.50	22.50		
	Road5		2	150.00	0.50	0.50	75.00		
	Road6		2	135.00	0.50	0.50	67.50		
	Raod 7		2	55.00	0.50	0.50	27.50		
							415.00	186.92	**77572.00**
	Basic rate	**82.00**							
	Loading and unloading with 10km lead= 68+2.5x1.28x10 = 100	**100.00**							
	Area Weightage 6%	**4.92**							
	Final Rate	**186.92**							
2	Removing & Refixing Stone slabs of drains and Pointing in C.M(1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17)								
	BS Slab Drain	Sqm							
	Drain								
	Road1(from NH4)		2	125	1.35	--	337.50		
	Road2		2	170	1.35	--	459.00		
	Road3		2	150	1.35	--	405.00		
	Road4		2	45	1.35	--	121.50		
	Road5		2	150	1.35	--	405.00		
	Road6		2	135	1.35	--	364.50		
	Raod 7		2	55	1.35	--	148.50		
	Consider 40% total length						896.40		
	cover		1	350.00	1.20		420.00		
	Consider 20% Missing slabs and damaged slabs						-84.00		
	Consider 20% Missing slabs and damaged slabs						-179.28		
							1053.12	80.56	**84839.00**
	Basic rate	**76.00**							
	Area Weightage 6%	**4.56**							
	Final Rate	**80.56**							
3	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)								
		Sqm							
	Consider 20% Missing slabs and damaged slabs						263.28		
							263.28	665.68	**175260.00**
	Basic rate	**628.00**							
	Area Weightage 6%	**37.68**							
	Final Rate	**665.68**							

No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
4	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.142, I.No.19.14 of PW,P&IWTD S.R 2016-17)								
	Bad Reaches	Cum							
			45	2.00	2.50	0.20	45.00		
			20	10.00	6.00	0.20	240.00		
			25	20.00	1.50	0.20	150.00		
			30	20.00	2.00	0.20	240.00		
			13	1.00	1.20	0.20	3.12		
							678.12	148.76	**100877.00**
	Basic rate	**46.00**							
	Loading and unloading with 10km lead= 68+2.5x1.28x10 = 100	**100.00**							
	Area Weightage 6%	**2.76**							
	Final Rate	**148.76**							
5	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechaniqal mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.157, I.No.20.18 of PW,P&IWTD SR 2016-17)								
	Bad Reaches	Cum							
			20	2.00	2.50	0.23	23.00		
			20	10.00	6.00	0.23	276.00		
			25	20.00	1.50	0.23	172.50		
			30	20.00	2.00	0.23	276.00		
			20	1.00	1.20	0.23	5.52		
							753.02	1768.08	**1331400.00**
	Basic rate	**1668.00**							
	Area Weightage 6%	**100.08**							
	Final Rate	**1768.08**							
6	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.160, I.No.21.6 of PW,P&IWTD SR 2016-17)								
	Bad Reaches	Sqm							
			20	2.00	2.50	--	100.00		
			20	10.00	6.00	--	1200.00		
			25	20.00	1.50		750.00		
			30	20.00	2.00	--	1200.00		
			20	1.00	1.20	--	24.00		
							3274.00	27.56	**90231.00**
	Basic rate	**26.00**							
	Area Weightage 6%	**1.56**							
	Final Rate	**27.56**							
7	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatement including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.160, I.No.21.2 of PW,P&IWTD SR 2016-17)								
	Road Formation	Sqm							
	Road1(from NH4)		1	125.00	9.00	--	1125.00		
	Road2		1	170.00	7.20	--	1224.00		
	Road3		1	150.00	6.00	--	900.00		
	Road4		1	45.00	9.00	--	405.00		

No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
	Road5		1	150.00	7.80	--	1170.00		
	Road6		1	135.00	7.50	--	1012.50		
	Road7		1	55.00	6.50		357.50		
							6194.00	3.18	**19697.00**
	Basic rate	**3.00**							
	Area Weightage 6%	**0.18**							
	Final Rate	**3.18**							
8	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.160 I.No.21.7 of								
	For Laying BC	Sqm							
	Road1(from NH4)		1	125.00	9.00	--	1125.00		
	Road2		1	170.00	7.20	--	1224.00		
	Road3		1	150.00	6.00	--	900.00		
	Road4		1	45.00	9.00	--	405.00		
	Road5		1	150.00	7.80	--	1170.00		
	Road6		1	135.00	7.50	--	1012.50		
	Road7		1	55.00	6.50		357.50		
							6194.00	11.66	**72222.00**
	Basic rate	**11.00**							
	Area Weightage 6%	**0.66**							
	Final Rate	**11.66**							
9	KSRRB M500-19. Providing and laying bituminous concrete 40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 6% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.164 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17)								
	Road Formation	Cum							
	Road1(from NH4)		1	125.00	9.00	0.04	45.00		
	Road2		1	170.00	7.20	0.04	48.96		
	Road3		1	150.00	6.00	0.04	36.00		
	Road4		1	45.00	9.00	0.04	16.20		
	Road5		1	150.00	7.80	0.04	46.80		
	Road6		1	135.00	7.50	0.04	40.50		
	Road7		1	55.00	6.50	0.04	14.30		
							247.76	7083.98	**1755127.00**
	Basic rate	**6683.00**							
	Area Weightage 6%	**400.98**							
	Final Rate	**7083.98**							
10	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.197, I.No.24.15 of PW,P&IWTD SR 2016-17)								
	Edge line	Sqm							
			2	830.00	0.10	--	166.00		
			145		0.10		14.50		
							180.50	542.72	**97961.00**
	Basic rate	**512.00**							
	Area Weightage 6%	**30.72**							
	Final Rate	**542.72**							
11	Providing and fixing Pre cast solid concrete kerb stones made out of CC 1:2:4 of size 450x200x400 mm and finished with CM 1:3 plastering and finishing cutting etc., complete. Page No. 25 / Item No. 5.29.1								

No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
		Nos							
	Main road		Not Executed				0.00	386.90	**0.00**
	Basic rate	**365.00**							
	Area Weightage 6%	**21.90**							
	Final Rate	**386.90**							
12	Providing and applying ready mix priming coat over ocncrete / masonry, / asbestos cement sheet / plastered surfaces includding preparing the surface after thorougly cleaning of oil, grease, dirt and other foreign matter and sand papering including cost of materials, labour compelte as per specifications. Page No. 121 / Item No. 15.80								
		Sqm							
	Main road		Not Executed				0.00	27.56	**0.00**
	Basic rate	**26.00**							
	Area Weightage 6%	**1.56**							
	Final Rate	**27.56**							
13	Providing and applying spray painting in two coats (excluding priming coat) over ocncrete / masonry, / asbestos cement sheet / plastered surfaces includding preparing the surface after thorougly cleaning of oil, grease, dirt and other foreign matter and sand papering including cost of materials, labour compelte as per specifications. Page No. 121 / Item No. 15.81								
		Sqm							
	Main road		Not Executed				0.00	69.96	**0.00**
	Basic rate	**66.00**							
	Area Weightage 6%	**3.96**							
	Final Rate	**69.96**							
14	Providing and laying heavy cobble stones 60mm thick interlock pavers, using cement and course sand for manufactures of blocks of approved size, shape and colour with a minimum compressive strength of 281 Kg/per sqm over 50mm thick sand bed (avg thickness) and compacting with plate vibrtaor having 3 tons compactiion force there by forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including coat of materials, labour and hom machineries complete as per specifications., Specififcation No.KBS.(Pno. 101 of ino.14.6 in PW, P& IWTD SR2016-17)								
		Sqm							
	Main road		Not Executed				0.00	69.96	**0.00**
	Basic rate	**66.00**							
	Area Weightage 6%	**3.96**							
	Final Rate	**69.96**							
	EIRL								
E1	KSRB 5-14 : Providing and constructing load bearing wall with solid concrete blocks of size 400x150x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 4.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications. KBS No.5.4 **Page No. 27 / Item No. 5.26.2, PWD SR 2018-19**								
			2x2	80.00		0.40	128.00		
	Basic Rate	924.00					**128.00**	979.44	**125368.00**
	Area Weightage @ 6%	55.44							
	Total	**979.44**							
E2	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, for coping. Including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. **Page. No. 255 / Item No.34.11 of PWD SR 2018-19**								
	Bed Concrete								
			2	80.00	0.45	0.10	7.20		
	Coping Concrete								
			4	80.00	0.20	0.10	6.40		
	Basic Rate	5283.00					**13.60**	5599.98	**76160.00**

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	Area Weightage @ 6%	316.98							
	Total	**5599.98**							
E3	Providing **precast slab of 100 mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc., complete as per the direction of engineer in charge- Data rate.								
			2	80.00	1.20		192.00		
							192.00	2337.00	**448704.00**
							Total Construction Cost		**4455418.00**
							KRIDL Charges @ 10%		**445542.00**
							Labour Cess @ 1%		**44554.00**
							Sub Total		**4945514.00**

Certificate.

1 The workspot was inspected and work is found to be necessary.
2 The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17 & 2018-19
4 The provisions made in the estimate are necessary and essential.

Assistant Engineer

Assistant Executive Engineer

Executive Engineer

Technical Sanction
Accorded For Rs 4945514.00
Head of A/C 2333
CER NO 31A Dt 28/10/2019

TA

CE (YNK)